FREIGHTLINER® LLC
A DaimlerChrysler Company

Recall Campaign

January 2001
FL264A-E
(NHTSA 00V-279.001)

Subject: Meritor-WABCO Hydraulic ABS ECU

MODELS AFFECTED: Specific Freightliner FLN and Business Class vehicles; Freightliner Custom Chassis FS65 and FB65 buses, MB shuttle buses, MT step vans, and MC recreational vehicles manufactured between March 1, 1999, and January 13, 2000, equipped with a Meritor-WABCO Hydraulic ABS ECU.

GENERAL INFORMATION

Freightliner LLC, on behalf of its Freightliner Trucks Division and wholly-owned subsidiary, Freightliner Custom Chassis Corporation, has determined that the subject vehicles are not in compliance with the ABS requirements of Federal Motor Vehicles Safety Standards (FMVSS105 S5.3.1(c)).

There are approximately 9,000 vehicles involved in this campaign. We anticipate 100% of these vehicles will be modified.

This non-compliance is due to the inability of the ABS internal diagnostic system to detect an excessive gap between the wheel speed sensor and the tone ring. If this occurs, the ABS fault light will not activate and the ABS will not function at this wheel position.

NOTE: If the vehicle has had Field Service Campaign SF192A (WABCO ABS ECU) performed, this recall is not necessary, and no further action is required.

The modification consists of removing and replacing the ABS ECU on all buses, step vans, multi-passenger vehicles, and recreational vehicles and reprogramming the ECU on business class vehicles.

WORK INSTRUCTIONS

Please refer to attached work instructions.

REPLACEMENT PARTS

Replacement kits are now available and can be obtained by ordering the kit number(s) listed below from your facing Parts Distribution Center. **If you have replacement kit 25-SF192-000 already in stock, it can be used as the replacement kit for vehicles involved in FL264A ONLY, in lieu of 25-FL264-000.**

If our records indicate your dealership has ordered any vehicles involved in campaign number FL264A-E, a list of the customers and vehicle identification numbers is enclosed. Please refer to this list when ordering parts for this campaign.

Refer to Table 1 for FL264A replacement kit 25-FL264-000.

25-FL264-000

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Suggested Wholesale*
FL264A	25-FL264-000	Meritor-WABCO ECU	WAB446 109 007 0	1	$259.43 U.S. $422.75 CAN

* Please charge all Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls.

Table 1

Refer to Table 2 for FL264B replacement kit 25-FL264-001.

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25-FL264-001

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Suggested Wholesale*
FL264B	25-FL264-001	Meritor-WABCO ECU	WAB446 044 084 0	1	$272.47 U.S. $444.09 CAN

* Please charge all Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls.

Table 2

Refer to Table 3 for FL264C replacement kit 25-FL264-002.

25-FL264-002

Campaign Number	Kit Number	Part Description	Part Number	Qty. per Kit	Suggested Wholesale*
FL264C	25-FL264-002	Meritor-WABCO ECU	WAB446 044 083 0	1	$272.47 U.S. $444.09 CAN

* Please charge all Direct Warranty Customers the above-listed price for the kit, as they are authorized to perform their own Recalls.

Table 3

REMOVED PARTS

Please follow Warranty Failed Parts Tracking shipping instructions for the disposition of all removed parts.

LABOR ALLOWANCE

Refer to Table 4 for labor allowance.

Campaign Number	Procedure	Time Allowed (hours)	SRT Code	Damage Code
FL264ABC	Remove and replace ABS ECU	0.9	996-0378A	000-Modifiedx
FL264DE	Reprogram ABS ECU	0.5	996-0378B	000-Modifiedx

Table 4

IMPORTANT: When the recall has been completed, clean a spot on the appropriate location of the vehicle and attach a completion sticker (Form W–147) referencing the modification number and date the work was performed.

CLAIMS FOR CREDIT

You will be reimbursed for your parts, labor, and handling by submitting your claim through the Warranty system within 30 days of completing the campaign. Please reference the following information in QuickClaim:

- Claim type is **Recall**.
- In the FSDOC field, enter the campaign number and the appropriate condition code (e.g. **FL264A, FL264B, etc.**).
- In the Primary Failed Part Number field, enter **25-FL264-000**
- In the Parts field, enter the appropriate kit number(s) as shown in the Replacement Part Tables.

NOTE: ServicePro®/Service Advisor® must be viewed prior to performing the recall to ensure the vehicle is involved and the recall has not been previously completed. Also, check for a completion sticker prior to beginning the modification.

Contact the Warranty Campaigns Department at (800) 547-0712, from 7:00 a.m. to 4:30 p.m. Pacific Time, Monday through Friday, or the Customer Assistance Center at (503) 745-7877, after normal business hours, if you have any questions or need additional information.

To return excess kit inventory related to this campaign, U.S. dealers must submit a Parts Authorization Return (PAR), to the Memphis PDC, and Canadian dealers must submit a PAR to their facing PDC. All kits must be in resaleable condition. PAR requests must include the original purchase invoice number.

The letter notifying vehicle owners is included for your reference.

Please note that the National Traffic and Motor Vehicle Safety Act, as amended (49 USC), requires the owner's vehicle(s) be corrected within a reasonable time after parts are available to you. The Act states that failure to repair a vehicle within 60 days after tender for repair shall be prima facie evidence of an unreasonable time. However, circumstances of a particular situation may reduce the 60 day period. Failure to repair a vehicle within a reasonable time can result in either the obligation to (a) replace the vehicle with an identical or reasonably equivalent vehicle, without charge, or (b) refund the purchase price in full, less a reasonable allowance for depreciation. The Act further prohibits dealers from selling a vehicle unless all outstanding recalls are performed. Also, any lessor is required to send a copy of the recall notification to the lessee.

Finally, the Act states that a remedy need not be provided without charge if the vehicle was bought by the first purchaser more than ten (10) calendar years before notice is given.

WARRANTY CAMPAIGNS DEPARTMENT

Recall Campaign

FREIGHTLINER® LLC
A DaimlerChrysler Company

January 2001
FL264A-E
(NHTSA 00V-279.001)

Copy of Letter to Owner

Subject: Meritor-WABCO Hydraulic ABS ECU

Dear Vehicle Owner:

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act and the Canadian Motor Vehicles Safety Act.

Freightliner LLC, on behalf of its Freightliner Trucks Division and wholly-owned subsidiary, Freightliner Custom Chassis Corporation, has determined that a non-compliance with ABS requirements of Federal Motor Vehicles Safety Standards (FMVSS105 S5.3.1(c)) exists on specific Freightliner FLN and Business Class vehicles; Freightliner Custom Chassis FS65 and FB65 buses, MB shuttle buses, MT step vans and MC recreational vehicles manufactured between March 1, 1999, and January 13, 2000, equipped with a Meritor-WABCO Hydraulic Anti-lock Brake System Electronic Control Unit (ABS ECU).

Please note, if you've had Field Service Campaign SF192A (WABCO ABS ECU) performed, you do not need to have this recall performed and no further action is required.

This non-compliance is due to the inability of the ABS internal diagnostic system to detect an excessive gap between the wheel speed sensor and the tone ring. If this occurs, the ABS fault light will not activate and the ABS will not function at this wheel position.

The modification consists of removing and replacing the ABS ECU on all buses, step vans, multi-passenger vehicles, and recreational vehicles and reprogramming the ECU on business class vehicles.

Repair kits are now available for authorized dealers to order. Contact your authorized dealer to arrange to have your vehicle(s) modified and to assure that parts are available at the dealer.

When you contact your dealer, refer to campaign number **FL264A-E**. Once kit(s) are received at the dealership, the modification will take approximately one hour and will be performed at no charge to you.

IMPORTANT: When the modification has been completed, please ensure that a sticker has been affixed to your vehicle referencing **FL264A-E** and the date the work was performed.

If you do not own the vehicle that corresponds to the identification number(s) which appear on the Recall Notification, please return the notification to the Warranty Campaigns Department with any information you can furnish that will assist us in locating the present owner. If you have leased this vehicle, please make sure this notification is immediately forwarded to the lessee.

If you are unable to have the defect remedied without charge and within a reasonable time after you tender the vehicle for repair, please contact the Warranty Campaigns Department at (800) 547-0712, 7:00 a.m. to 4:30 p.m. Pacific Time, Monday through Friday, or the Customer Assistance Center at (800) FTL-HELP, after normal business hours. You may also wish to notify the Administrator, National Highway Traffic Safety Administration, 400 7th Street S.W., Washington, D.C. 20590, or phone (888) 327-4236. If your vehicle is involved in the Canadian portion, you may notify the Manager, Recall and Public Compliance, Road and Motor Vehicle Traffic Safety Branch, Transport Canada, Ottawa, Ontario, or phone (613) 993-9851.

We regret any inconvenience this action may cause, but feel certain you understand our interest in motor vehicle safety.

WARRANTY CAMPAIGNS DEPARTMENT

Enclosure

Work Instructions

Subject: Meritor-WABCO Hydraulic ABS ECU

MODELS AFFECTED: Specific Freightliner FLN and Business Class vehicles; Freightliner Custom Chassis FS65 and FB65 buses, MB shuttle buses, MT step vans, and MC recreational vehicles manufactured between March 1, 1999, and January 13, 2000, equipped with a Meritor-WABCO Hydraulic ABS ECU.

Table 5 lists the ECU part numbers and location for each vehicle included in this recall.

Condition	Vehicle	ECU			Replacement Kit
		Type	Old Part Number	New Part Number	
A	Shuttle Bus (FB65, MB45, MB55) Recreational Vehicle (MC45) Walk-In Van (MT45, MT55)	Frame Mount	446 109 000 0	446 109 007 0	-000
B	School Bus (FS65)	Cab Mount*	446 044 072 0	446 044 084 0	-001
C	School Bus (FS65)	Cab Mount*	446 044 071 0	446 044 083 0	-002
D	Business Class	Cab Mount†	446 044 071 0	Reprogram existing ECU	—
E	Business Class	Cab Mount†	446 044 072 0		

* On School Buses, the ECU is mounted on the right-hand side of the frontwall.

† On Business Class vehicles, the ECU is mounted behind the passenger's seat.

Table 5, ECU Cross-Reference

1. Park the vehicle on a level surface, set the parking brakes, and shut down the engine. Chock the rear tires.
2. Before starting this procedure, check the applicable location on the vehicle for a completion sticker (Form W-147). If a sticker for FL264 or SF192 is found, no further work is required.
3. Turn on the ignition switch and check the antilock and traction control indicator lights on the dash. They should light, then go out after about 3 seconds.

   If they do not go out, there may be a system fault. Correct the problem before replacing or reprogramming the electronic control unit (ECU). Pre-existing faults are not part of this recall.

ECU Replacement

Replace the ECU on the Freightliner Custom Chassis Corporation vehicles identified in **Table 5** as follows:

CAB-MOUNTED ECU

1. Disconnect batteries and remove the three electrical connectors from the ECU. See **Fig. 1**.
2. Remove the four capscrews and washers attaching the ECU to the mounting bracket; remove the ECU.
3. Place the new ECU into position on the mounting bracket and secure in place with four capscrews and washers.
4. Install the 9-pin, 18-pin, and 15-pin harness connectors in the ECU.
5. Remove the chocks from the tires.
6. Test drive the vehicle.

   6.1 Start the vehicle. The ABS indicator lamp will come on and stay on.

6.2 Drive the vehicle. When the speed reaches 4 to 6 mph (6 to 10 kph), the ABS indicator lamp will go out.

6.3 If the lamp does not go out at speeds of 4 to 6 mph (6 to 10 kph), check the sensor adjustment. For instructions, see the WABCO ABS section in Group 42 of the appropriate vehicle service/workshop manual.

7. Using a hammer, destroy the old ECU. Then, properly dispose of the unit.

8. Enter the recall number and the date the work was performed on a completion sticker (Form W-147). Clean an area on the applicable location on the vehicle and attach the sticker.

FRAME-MOUNTED ECU

Frame-mounted ECUs are installed on the left frame rail.

1. Disconnect batteries and loosen the retaining screw on the access cover on each side of the ECU. See **Fig. 2**.

IMPORTANT: Make sure you mark the electrical connectors before removing them from frame-mounted ECUs. They are 12-pin connectors and must be installed in the correct location.

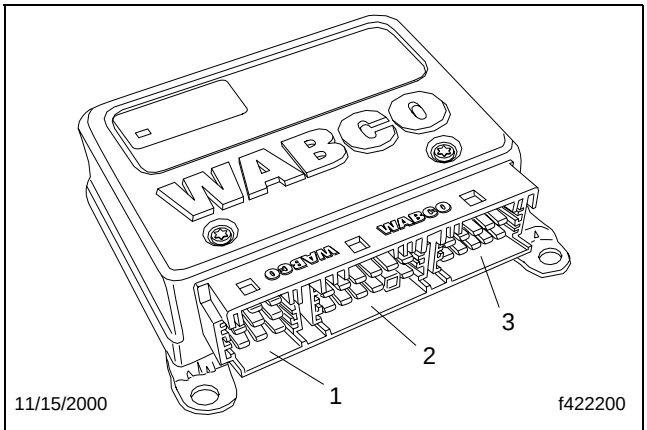
2. Mark the three electrical harness connectors and disconnect them from the ECU.

3. Remove the three bolts, washers, and hexnuts that attach the ECU to the frame mounting bracket. Remove the ECU.

4. Place the new ECU into position on the mounting bracket and secure in place with the three bolts, washers, and hexnuts.

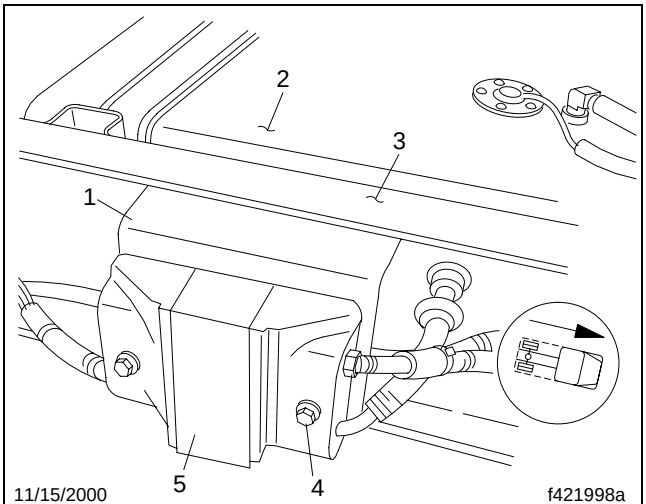
5. Install the three 12-pin harness connectors in the ECU as marked. Make sure they are firmly in place.

6. Close the access covers and tighten the two retaining screws.



1. 9-Pin Connector
2. 18-Pin Connector
3. 15-Pin Connector

Fig. 1, Cab-Mounted ECU



1. ECU Mounting Bracket
2. Fuel Tank
3. Frame Rail
4. Access Cover Retaining Screw
5. ECU

Fig. 2, Frame-Mounted ECU

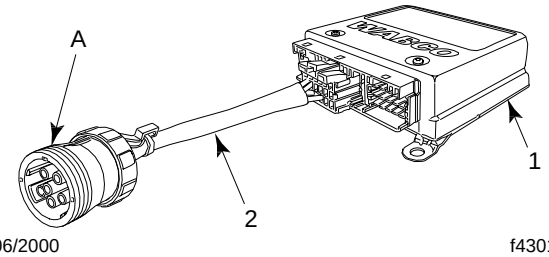
7. Remove the chocks from the tires.
8. Test drive the vehicle.
   8.1 Start the vehicle. The ABS indicator lamp will come on and stay on.
   8.2 Drive the vehicle. When the speed reaches 4 to 6 mph (6 to 10 kph), the ABS indicator lamp will go out.
   8.3 If the lamp does not go out at speeds of 4 to 6 mph (6 to 10 kph), check the sensor adjustment. For instructions, see the WABCO ABS section in Group 42 of the appropriate vehicle workshop/service manual.
9. Using a hammer, destroy the old ECU. Then, properly dispose of the unit.
10. Enter the recall number and the date the work was performed on a completion sticker (Form W-147). Clean an area on the applicable location on the vehicle and attach the sticker.

ECU Reconfiguration

Reconfigure the ECU on Business Class vehicles. Use the WABCO Reconfiguration Tool (**Fig. 3**).

NOTE: This tool is for reconfiguration of hydraulic ABS systems only.

1. Turn the vehicle ignition off.
2. Connect the 6- or 9-pin connector at the end of the reconfiguration tool adaptor harness to the diagnostic plug on the vehicle.
3. Turn on the vehicle ignition.
4. Check the ABS indicator lamp on the vehicle dash:
   - If the lamp flashes slowly (approximately once per second), the reconfiguration was successful.
   - If the lamp flashes quickly (approximately 5 times per second), the reconfiguration was not successful. The hydraulic ABS ECU mounted on the vehicle must be replaced with an updated one.
5. Disconnect the reconfiguration tool.
6. Remove the chocks from the tires.
7. Test drive the vehicle.
   7.1 Start the vehicle. The ABS indicator lamp will come on and stay on.



A. 6-pin adaptor shown, 9-pin adaptor available.
1. Reconfiguration Tool
2. Adaptor Harness

Fig. 3, Hydraulic ABS Reconfiguration Tool

7.2 Drive the vehicle. When the speed reaches 4 to 6 mph (6 to 10 kph), the ABS indicator lamp will go out.

7.3 If the lamp does not go out at speeds of 4 to 6 mph (6 to 10 kph), check the sensor adjustment. For instructions, see **Section 42.30** of the *Business Class Trucks Service Manual.*

8. Enter the recall number and the date the work was performed on a completion sticker (Form W-147). Clean an area on the applicable location on the vehicle and attach the sticker.